

DISPLACEMENT TRANSDUCERS

DC/DC-L.V.D.T. DM SERIES

- INFINITE RESOLUTION
- 12v or 24v MODELS
- CONFIGURATION OPTIONS
- LIGHTWEIGHT CORES
- HIGH ACCURACY



The DM series of DC/DC linear transducers cover the range $\pm 2.5\text{mm}$ to $\pm 50\text{mm}$ and are intended as a general purpose instrument. As with all other Sensonics LVDT's they are robustly housed with impregnated coils and internally potted so that they are suitable for use in the majority of industrial applications.

Uses include extensometers, hydraulic actuators, float positions, thickness measurements, geophysical parameters, earth movements . . .

The series is available with the lightweight core supplied as a basic unattached item (DMF) or with the core attached to an extension rod (DMG) or with the core and extension rod captive and spring loaded (DMS).

Other DC-DC series in the Sensonics range are:

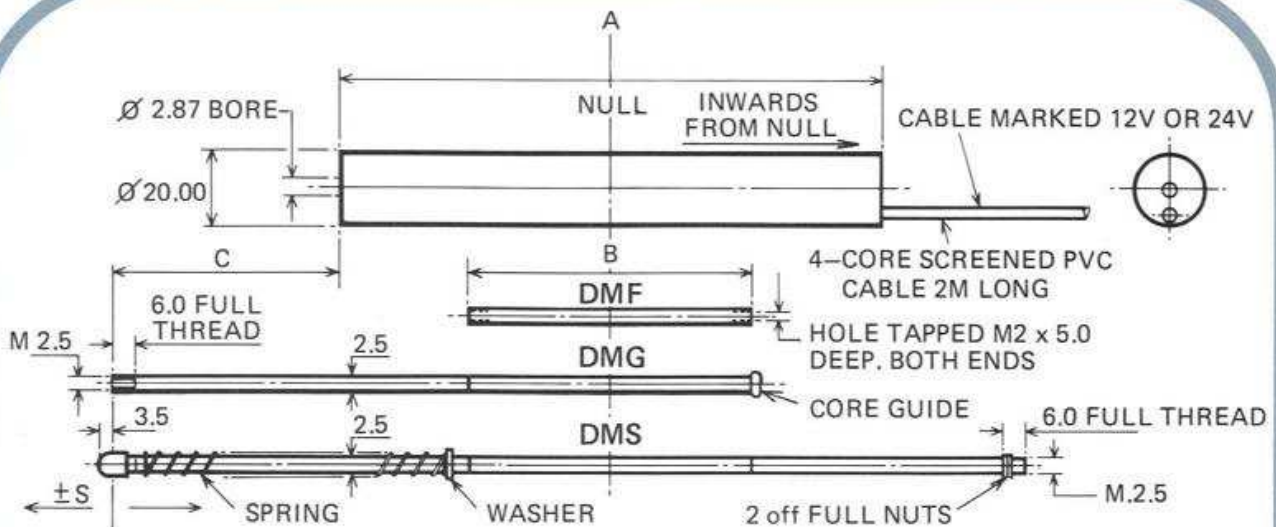
DF Series $\pm 15\text{mm}$ to $\pm 50\text{mm}$

DE Series $\pm 25\text{mm}$ to $\pm 300\text{mm}$

The DF Series has a larger bore to core clearance, but a heavier core and the DE series has a heavier core and extension assembly which makes it more robust for its longer stroke capabilities.

12v or 24v models in the DM series are available in any of the three configurations giving 30 standard options.

SENSONICS



Connections

RED INPUT + VE 12V OR 24V D.C.

BLUE INPUT - VE

GREEN OUTPUT +VE GOING WITH CORE DISPLACED INWARDS FROM NULL

YELLOW OUTPUT - VE

SCREEN ISOLATED FROM INSTRUMENT

FREECORE = DMF SERIES

GUIDED CORE = DMG SERIES

SPRUNG LOADED = DMS SERIES

SPECIFICATION

			DM - 2.5	DM - 5	DM - 12.5	DM - 25	DM - 50
Stroke	S	± mm	2.5	5	12.5	25	50
	A	mm	44.0	57.0	87.0	153.0	222.0
	B	mm	20.3	20.0	30.15	76.2	94.0
	C	mm	23.5	31.0	46.5	63.0	90.0
Core weight		gms	0.8	0.8	1.2	3.1	3.8
Core + extension		gms	2.5	3.0	4.2	6.8	9.5
12V Excitation	DMF	Free Core	IS 021	IS 023	IS 025	IS 027	IS 029
	DMG	Guided Core	IS 022	IS 024	IS 026	IS 028	IS 030
	DMS	Sprung Loaded	IS 066	IS 067	IS 068	IS 069	IS 070
	Sensitivity ±15%			± 2V	± 2.5V	± 3.0V	± 3.5V
24V Excitation	DMF	Free Core	IS 031	IS 033	IS 035	IS 037	IS 039
	DMG	Guided Core	IS 032	IS 034	IS 036	IS 038	IS 040
	DMS	Sprung Loaded	IS 071	IS 072	IS 073	IS 074	IS 075
	Sensitivity ±15%			± 4.5V	± 5V	± 5.8V	± 7V
Output Impedance		ohms	9 K 4				
Output Load		ohms	50 K				
Thermal zero shift		FRO/°C	Better than 0.005%				
Thermal span shift		FRO/°C	Better than 0.10%				
Output Ripple		FRO	Less than 0.20%				
Frequency Response		Hz	DC to 75				
Input Current		mA	30 ± 15%				
Temp. range		°C	0 to 80°C				
Linearity			Better than ± 0.5% standard to ± 0.25% by selection				

TYPE NUMBERS

The 'IS' Numbers above indicate a unique transducer, e.g. IS 067 is a Spring loaded ±5mm stroke 12 Volt excitation unit, or DMS 5 12 Volt.

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